FUEL NEWS

USING OPAL IN WATERCRAFT

INTRODUCTION

Opal is a 91 grade fuel for spark ignition engines that is primarily used where petrol sniffing is a problem within the community. The fuel meets all of the current federal and state determinations for unleaded 91 RON fuel. It has very low to zero aromatic compounds that are believed to be associated with the narcotic effects of sniffing petrol. Opal is the only fuel which can be purchased in some areas and some equipment may experience driveability issues. Always consult the manufacturer's hand book to determine the correct octane requirement of the vehicle.

WATERCRAFT

Watercraft may experience starting or performance problems when using Opal fuel. Such as surging at idle speeds when trolling or a slight miss at high speeds when on the open water.
This maybe caused by over fuelling as Opal will run a richer mixture which may also cause spark plug fouling.

RECOMMENDATIONS

We recommend that you have equipment retuned to the factory settings, and if problem still persists then try an octane booster such as Vale master plus, (ref bottle for mixing levels) can resolve these problems.
This is an Iron base octane booster which lowers the burn off temperature of carbon to minimize spark plug fouling and also increases the fuel Octane by 1 number.

For more information and where to buy Valve master Plus
Call the Valve master team.
Ph: (02) 8978 1000 www.valvemaster.com.au

For more information on retuning to factory settings we recommend that you contact your nearest dealer.

STORAGE LIFE

When stored under shelter in a sealed container, the storage life of OPAL is one year. When stored in opened containers or fuel tanks then storage life is reduced to one month due to loss of volatile components. Adding one third fresh fuel can restore performance.

SHOULD I KEEP MY BOAT TANK FULL?

It is best to maintain a full tank of fuel when the engine is not in use. This will reduce the void space above the fuel and will reduce the flow of air in and out of the tank with changes in temperature. This will reduce condensation on the internal walls of the tank and will limit exposure of the fuel to humidity and condensation.

HOW SHOULD I PREPARE FOR LENGHTY STORAGE?

When preparing to store a boat for extended periods of two months or more, it is best to completely remove all fuel from the tank. If it is difficult or not possible to remove the fuel, maintaining a full tank of fuel with a fuel stabilizer added to provide fuel stability and corrosion protection is recommended. A partially full tank is not recommended because the void space above the fuel allows air movement that can bring in water through condensation as the temperature cycles up and down. This condensation potentially becomes a problem.

SMALL VOLUME

Always use fuel containers that are stamped as meeting AS 2906 and always handle fuel with care. Store your fuel in a safe place that is dry and free from large temperature changes.

LARGE VOLUME

The key aspects here are to consider if you can handle large drums, achieve adequate oil and fuel mixing, and do this in a safe manner. Only proceed if you can do so with the right equipment and personal safety equipment. For 200 L volumes it is best to have mixed oil and fuel concentrate that can be added to the drum first. Subsequently fill the drum to capacity. Transferring from a full to an empty drum is the preferred method.

MAINTENANCE

Maintenance on outboards is critical and generally is done every 100hours of operation 6 months, items such as engine oil and filter, spark plugs, fuel filters (low and high pressure where fitted) and tappet adjustment.

Most Honda outboards have two fuel filters, low and high pressure and generally the high pressure filter is the one that doesn't get changed as it's out of site under the manifold which requires to be removed or mechanics don't know that there are two filters.

Symptoms of a blocked fuel filter are loss of power, more noticeable under load and may also experience rough idling and hard starting.

MIXING TABLE

The table below will be useful for mixing intermediate volumes and determining oil quantities for other fuel oil ratios. It shows the amount of oil in ml required for 1L, 5L and 20L of fuel.

Fuel to Oil Ratio	1L of mix	5L of mix	20L of mix
20 to 1	50ml	250ml	1000ml
25 to 1	40ml	200ml	800ml
30 to 1	33ml	167ml	667ml
35 to 1	29ml	142ml	570ml
40 to 1	25ml	125ml	500ml
45 to 1	22ml	110ml	444ml
50 to 1	20ml	100ml	400ml